## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## Listing of Claims:

- 1. (currently amended) A vaccine composition against infection of *M. Mannheimia*haemolytica in cattle comprising an effective immunizing amount of at least one
  immunogen selected from the group consisting of (i) recombinant PlpE outer membrane
  protein of *M. Mannheimia haemolytica*, (ii) an antigenic subunit of thereof, and (iii)
  recombinant PlpE outer membrane protein of *M. Mannheimia haemolytica* or antigenic
  subunits thereof in combination with at least one other antigen against *M. Mannheimia*haemolytica, and further comprising a pharmaceutically acceptable carrier or diluent.
- 2. (original) The composition according to claim 1, wherein said carrier is an adjuvant.
- 3. (currently amended) The composition according to claim 1, wherein said recombinant PlpE outer membrane protein of *M. Mannheimia haemolytica* comprises the polypeptide amino acid sequence of SEQ ID NO: 2.
- (currently amended) The composition according to claim 3, wherein said subunits are selected from the group consisting of the polypeptides amino acid sequences of SEQ ID NOS: 11-18.

- 5. (currently amended) The composition of claim 1, wherein the subunit comprises the polypeptide amino acid sequences of SEQ ID NO: 12.
- 6. (Withdrawn) A method for inducing an immune response in cattle to provide immune protection against BRD and/or shipping fever, comprising administering to an at-risk bovine an effective amount of the vaccine composition of claim 1.
- (Withdrawn) The method according to claim 6, wherein the amount of vaccine composition includes between 10-100 μg of recombinant PlpE outer membrane protein of M. haemolytica or antigenic subunits of therof.
- 8. (Withdrawn) The method according to claim 7, wherein the amount of vaccine composition includes about 100 μg of recombinant PlpE outer membrane protein of M. haemolytica or antigenic subunits of thereof.